WHAT IS CLAIMED IS:

1. A method for estimating the subjective quality of a speech signal transmitted through a wireless network, said method comprising the step of:

analyzing the speech signal using an objective voice quality method; and

mapping a score output from the objective voice quality method into a mean opinion score (MOS) domain using a logistic function that has the form:

$$y = 1 + 4/(1 + \exp(-1.7244 * x + 5.0187))$$

where x = the score from said objective voice quality method which is in the range of -0.5 to 4.5;
y = the mapped score that is in the MOS domain which is in the range of 1 to 5.

2. The method of Claim 1, wherein said MOS domain has a scale wherein when:

y = 5.0 then the quality of the speech signal is excellent;

y = 4.0 then the quality of the speech signal is good;

y = 3.0 then the quality of the speech signal is fair;

y = 2.0 then the quality of the speech signal is poor; and

y = 1.0 then the quality of the speech signal is bad.

3. The method of Claim 1, wherein said logistic function has coefficients that were determined by using a Gauss-Newton method.

4. The method of Claim 1, wherein said objective voice quality method is a Perceptual Evaluation of Speech Quality (PESQ) method.

5. The method of Claim 1, wherein said logistic function provides an S-curve with a shape that has an asymptotic lower end, a nearly linear mid-section and an asymptotic upper end.

6. The method of Claim 1, wherein said mapped score is suitable for a field measurement tool.

7. A processing unit for estimating a quality of a speech signal transmitted through a wireless network by analyzing the speech signal using an objective voice quality method and mapping a score output from the objective voice quality method into a mean opinion score (MOS) domain using a logistic function that has the form:

$$y = 1 + 4/(1 + \exp(-1.7244 * x + 5.0187))$$

where x = the score from said objective voice quality method which is in the range of -0.5 to 4.5;

y = the mapped score that is in the MOS domain which is in the range of 1 to 5.

8. The processing unit of Claim 7, wherein said MOS domain has a scale wherein when:

y = 5.0 then the quality of the speech signal is excellent;

y = 4.0 then the quality of the speech signal is good;

y = 3.0 then the quality of the speech signal is fair;

y = 2.0 then the quality of the speech signal is poor; and

y = 1.0 then the quality of the speech signal is bad.

9. The processing unit of Claim 7, wherein said logistic function has coefficients that were determined by using a Gauss-Newton method.

10. The processing unit of Claim 7, wherein said objective voice quality method is a Perceptual Evaluation of Speech Quality (PESQ) method.

11. The processing unit of Claim 7, wherein said logistic function provides an S-curve with a shape that has an asymptotic lower end, a nearly linear mid-section and an asymptotic upper end.

12. The processing unit of Claim 7, wherein said processing unit is used in a measurement tool that determines the speech quality of the wireless network.

13. A method for estimating a voice quality of a wireless network comprising the steps of:

receiving a degraded speech signal that was transmitted through the wireless network;

using an objective voice quality method and a logistic function to compare the degraded speech signal with a reference speech signal and output an estimated mean opinion score (MOS) which is an indication of the subjective quality of the degraded speech signal which in turn is an indication of the voice quality of the wireless network;

wherein said objective voice quality method outputs a score in the range of -0.5 to 4.5 which is converted into the estimated MOS which is in the range of 1.0 to 5.0 by the logistic function that has the form:

$$y = 1 + 4/(1 + \exp(-1.7244 * x + 5.0187))$$

where x = the score from said objective voice quality method;

y = the estimated MOS.

14. The method of Claim 13, wherein a wireless voice transceiving device is used to receive the degraded speech signal.

15. The method of Claim 13, wherein a processor is used to implement the objective voice quality method and the logistic function so as to compare the degraded speech signal with the reference speech signal and output the estimated MOS.

16. The method of Claim 13, wherein said estimated MOS has a scale wherein when:

y = 5.0 then the quality of the degraded speech signal is excellent;

y = 4.0 then the quality of the degraded speech signal is good;

y = 3.0 then the quality of the degraded speech signal is fair;

y = 2.0 then the quality of the degraded speech signal is poor; and

y = 1.0 then the quality of the degraded speech signal is bad.

17. The method of Claim 13, wherein said objective voice quality method is a Perceptual Evaluation of Speech Quality (PESQ) method.

18. A measurement device for estimating a voice quality of a wireless network comprising:

a receiving unit for receiving a degraded speech signal that was transmitted through the wireless network;

a processing unit that uses an objective voice quality method and a logistic function to compare the degraded speech signal with a reference speech signal and output an estimated mean opinion score (MOS) which is an indication of the subjective quality of the degraded speech signal which in turn is an indication of the voice quality of the wireless network; and

wherein said objective voice quality method outputs a score in the range of -0.5 to 4.5 which is converted into the estimated MOS which is in the range of 1.0 to 5.0 by the logistic function that has the form:

$$y = 1 + 4/(1 + \exp(-1.7244 * x + 5.0187))$$

where x = the score from said objective voice quality metric;

y = the estimated MOS.

19. The measurement device of Claim 18, wherein said receiving unit is a wireless voice transceiving device and said processing unit is a processor.

20. The measurement device of Claim 18, wherein said estimated MOS has a scale wherein when:

y = 5.0 then the quality of the degraded speech signal is excellent;

y = 4.0 then the quality of the degraded speech signal is good;

y = 3.0 then the quality of the degraded speech signal is fair;

y = 2.0 then the quality of the degraded speech signal is poor; and

y = 1.0 then the quality of the degraded speech signal is bad.

21. The measurement device of Claim 18, wherein said objective voice quality method is a Perceptual Evaluation of Speech Quality (PESQ) method.